(FILE 'HOME' ENTERED AT 16:34:28 ON 10 APR 2000)

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 16:34:40 ON 10 APR 2000

L1	895	S ADENINE NUCLEOTIDE TRANSLOCATOR
L2	184	S ANT?
L3	10	S ANT? AND FUSION
L4	4	DUP REM L3 (6 DUPLICATES REMOVED)
L5	2	S ANT2 AND FUSION
L6	156	S ANT2
L7	59	DUP REM L6 (96 DUPLICATES REMOVED)
L8	7	S L7 AND MEMBRANE
L9	97	S ANT2 AND EXPRESS?
L10	22	S ANT2 AND CDNA
L11	8	DUP REM L10 (14 DUPLICATES REMOVED)
L12	7	S ANT2 AND PURIFICATION
L13	113	S ANT 3
L14	0	S ANT3 AND PURIFICATION
L15	0	S ANT3 AND PURIF?
L16	4	S ANT3 AND CDNA
L17	0	S ANT3 5A EXPRESS?
L18	0	S ANT3 5A PROTEIN
L19	21	S L1 AND FUSION
L20	9	DUP REM L19 (12 DUPLICATES REMOVED)

EAST

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L1	14	adenine adj nucleotide adj translocator	USPAT; EPO; Derwent	2006/04/10 17:11
2	BRS	L2	12	ant1 and protein	USPAT; EPO; Derwent	2006/04/10 17:11
3	BRS	L3	3	ant2 and protein	USPAT; EPO; Derwent	2006/04/10 17:11
4	BRS	L4	2	ant3 and protein	USPAT; EPO; Derwent	2006/04/10 17:11

L6 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2000 ACS
AN 1997:673204 CAPLUS
DN 127:342467
TI Somatic cell mapping of the adenine nucleotide translocator gene family in cattle
AU L., Lei; Womack, James E.
CS Department Veterinary Pathobiology, Texas A&M University, College Station, TX, 77843, USA
SO Mamm. Genome (1997), 8(10), 773-774
CODEN: MAMGEC; ISSN: 0938-8990
PB Springer
DT Journal
LA English
AB Adenine nucleotide translocator [ADP/ATP translocase, (ANT), or ADP/ATP carrier (AAC)] is the most abundant mitochondrial protein. As an integral component of the inner mitochondrial **membrane**, it catalyzes the exchange of intramitochondrial ATP for cytoplasmic ADP, consequently controlling the ATP supply of the cell. Its central role in cellular energy supply suggests that ANT might be regulated in different tissues to fit tissue specific functional and developmental requirements. The authors assigned the bovine adenine nucleotide translocator ANT3 gene to chromosome X which segregated concordantly with **ANT2**. Both **ANT2** and ANT3 have been mapped on human chromosome X. However, ANT3 escapes X inactivation on the pseudoautosomal region of Xp22.3 in human, whereas **ANT2** is subjected to X-inactivation and localized on Xq13-q26 (Chen et al. 1990). Further localization of these genes will help clarify the evolutionary history of mammalian sex chromosomes.

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2000 ACS
AN 1999:698536 CAPLUS
TI Stress sensitive B encodes an adenine nucleotide translocase in Drosophila melanogaster
AU Zhang, Yong Q.; Roote, John; Brogna, Saverio; Davis, Andrew W.; Barbash, Daniel A.; Nash, David; Ashburner, Michael
CS Department of Genetics, University of Cambridge, Cambridge, CB2 3EH, UK
SO Genetics (1999), 153(2), 891-903
CODEN: GENTAE; ISSN: 0016-6731
PB Genetics Society of America
DT Journal
LA English
AB Adenine nucleotide translocases (ANT) are required for the exchange of ADP and ATP across the inner mitochondrial **membrane**. They are essential for life, and most eukaryotes have at least two different Ant genes. Only one gene had been described from Drosophila, and this had not been characterized genetically. We show that mutations in this gene correspond to the previously described lbc1, sesB and l(1)9Ed. Immediately adjacent to this gene is another encoding a second ANT protein, which has 78% identity to that encoded by sesB/l(1)9Ed. These two genes are transcribed from a common promoter, and their mRNAs are produced by differential splicing. Hutter and Karch suggested that the sesB ANT gene corresponded to Hmr, a gene identified by an allele that rescues otherwise inviable interspecific hybrids between Drosophila melanogaster and its sibling species. This hypothesis is not supported by

L8 ANSWER 4 OF 7 MEDLINE
AN 92340491 MEDLINE
DN 92340491
TI Differential expression of adenine nucleotide translocator isoforms in mammalian tissues and during muscle cell differentiation.
AU Stepien G; Torroni A; Chung A B; Hodge J A; Wallace D C
CS Department of Genetics and Molecular Medicine, Emory University School of Medicine, Atlanta, Georgia 30322..
NC HL-45572 (NHLBI)
NS-21328 (NINDS)
SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1992 Jul 25) 267 (21) 14592-7.
Journal code: HIV. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals; Cancer Journals
EM 199210
AB The adenine nucleotide translocator (ANT) catalyzes the exchange of ADP and ATP across the mitochondrial internal **membrane**. Its three isoforms, ANT1, **ANT2**, and ANT3 are coded by differentially regulated nuclear genes. The patterns of expression of these genes in human, bovine, and mouse tissue are similar. ANT1 is highly expressed in heart and skeletal muscle and is induced during myoblast differentiation. It is coordinately regulated with the nuclear gene for the mitochondrial ATP synthase beta subunit, with which it shares the positive muscle cis element, the OXBOX. **ANT2** is either absent or weakly expressed in all tissues. ANT3 is ubiquitously expressed in all tissues, and its transcript level is proportional to the level of oxidative metabolism. The tissue-specific expression of the ANT gene family thus provides insight into the molecular basis of the differential reliance of mammalian tissues on oxidative phosphorylation.

L11 ANSWER 7 OF 8 BIOSIS COPYRIGHT 2000 BIOSIS
AN 1994:435865 BIOSIS
DN PREV199497448865
TI A human pseudoautosomal gene ADP/ATP translocase, escapes X-inactivation whereas a homologue on Xq is subject to X-inactivation.
AU Schiebel, Katrin (1); Weiss, Birgit (1); Woehrle, Doris; Rappold, Gudrun (1)
CS (1) Institut Human Genetics, Univ. of Heidelberg, D-6900 Heidelberg Germany
SO Nature Genetics, (1993) Vol. 3, No. 2, pp. 81-87.
ISSN: 1061-4036.
DT Article
LA English
AB We report the cloning of a highly conserved pseudoautosomal gene on the human sex chromosomes. A **cDNA** clone was selected by crosshybridization with a microdissected clone from the chromosomal subregion Xp22.3. It encodes a previously characterized member of the ADP/ATP translocase family and plays a fundamental role in cellular energy metabolism. This gene, ANT3, is located approximately 1,300 kilobases from the telomere, proximal to the pseudoautosomal gene CSF2RA, and escapes X-inactivation. Interestingly, a homologue of ANT3, **ANT2**, maps to Xq and is subject to X-inactivation. These genes provide the first evidence of two closely related X-chromosomal genes, which show striking differences in their X-inactivation behaviour.

L20 ANSWER 2 OF 9 MEDLINE
AN 97284663 MEDLINE
DN 97284663
TI Thyroid hormone activates transcription from the promoter regions of some human nuclear-encoded genes of the oxidative phosphorylation system.
AU Li R; Lucakova K; Zaid A; Betina S; Fridell E; Nelson B D
CS Department of Biochemistry, Stockholm University, Sweden.
SO MOLECULAR AND CELLULAR ENDOCRINOLOGY, (1997 Apr 4) 128 (1-2) 69-75. Journal code: E69. ISSN: 0303-7207.
CY Ireland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199710
EW 19971002
AB Thyroid hormone (T3) modulates the mRNA levels for cytochrome c and the **adenine nucleotide translocator**-2 (ANT2) in adult rat liver. Here we show that T3 activates expression of a reporter gene driven from the human cytochrome c1 and ANT2 promoters transfected into human choriocarcinoma JEG3 cells. By contrast, the human F1-ATPase beta-subunit promoter responded marginally, thus providing a pattern of differential expression similar to that earlier observed in rats in vivo. T3-activation is dependent on co-expression of the thyroid hormone receptor (TR alpha1). Co-expression of both the TR and RXR receptors had no additional effect. Transient transfection of deletion constructs showed that T3 activation is retained by the proximal regions of the cytochrome c1 and ANT2 promoters, and, in the case of cytochrome c1, is lost upon removal of a fragment containing the transcription initiator ((nucleotides) (nt) + 1 to + 100) The promoter regions supporting T3-activation of the reporter genes appear to lack strong DNA binding